NewsRelease

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NOTE TO EDITORS: 04-045

HIGH-FLYING AIRCRAFT AT NASA LANGLEY TO SUPPORT GLOBAL AIR STUDY

Scientists at NASA Langley Research Center are relying on a futuristic-looking aircraft to help measure movements of pollution from a unique vantage point – about 10 miles high.

As part of a multi-agency effort to track air quality, NASA researchers are participating in the Intercontinental Chemical Transport Experiment-North America (INTEX-NA) that will measure the movements of pollution around the globe as part of a joint regional air-quality and climate study running through August 19. The high-altitude Proteus research aircraft from Scaled Composites, LLC, of Mojave, Calif., which holds several sustained altitude records, will carry a NASA Langley instrument payload to support the study.

Interested media will be able to meet NASA Langley atmospheric scientists conducting research for INTEX-NA; see the aircraft; and interview the Proteus pilot, Mike Melville, who recently made aviation history as the first civilian to fly a spaceship out of the atmosphere into low Earth sub orbit. Melville flew SpaceShipOne to a record-breaking altitude of approximately 62 miles making him the first private pilot to earn astronaut wings. Media wishing to participate in the 9:30 a.m. event on Friday, July 23, should call Margarette Lynch at 757/864-6124 to arrange for credentials and entry onto the Center.

The instrument suite on Proteus includes the National Polar Orbiting Environmental Satellite System (NPOESS) Atmospheric Sounder Test-bed Interferometer (NAST-I). The NAST-I instrument scans the atmosphere from beneath aircraft, providing detailed characteristics of the atmosphere and land surface, and atmospheric temperature and water vapor profiles. NAST activities prepare for operations of future Earth observing satellite instruments.

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In addition, a new instrument system from NASA Langley and a Virginia Space Grant Consortium (VSGC) team – MicroMAPS (Measurement of Air Pollution from Satellites) is also on Proteus supporting INTEX-NA. MicroMAPS, which measures carbon monoxide in the atmosphere, was recently flight-tested for the first time on Proteus and is a VSGC coordinated effort involving students and faculty from Virginia Tech, Old Dominion University and the University of Virginia.

NASA's Earth Science Enterprise is dedicated to understanding the Earth as an integrated system and applying Earth System Science to improve prediction of climate, weather, and natural hazards using the unique vantage point of space.

For information about the INTEX-NA campaign on the Internet, visit:

http://cloud1.arc.nasa.gov/intex-na/

For information about Atmospheric Science research at NASA Langley, visit:

http://asd-www.larc.nasa.gov/new_AtSC/

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